Attorney Docket No.: Q78647

Application No.: 10/725,003

## REMARKS

Reconsideration and allowance of the subject application are respectively requested. By this Amendment, Applicants have amended claims 1, 3, and 5 and canceled claims 2 and 4. Therefore, upon entry of this Amendment, claims 1, 3, 5-12, and 14-20 are all of the claims pending in the application. In response to the Office Action, Applicant respectfully submits that the claims define patentable subject matter.

# I. Overview of the Office Action

Claim 1 is objected to because of informalities. Claims 1-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,522,007 to Drouart et al. (hereinafter Drouart).

### II. Interview

Applicants thank the Examiner for the courtesies extended to Applicants' attorney, Brian Hannon, during the interview conducted on October 29, 2008.

# III. Claim Objection

Claim 1 is objected to because of informalities. By this Amendment, Applicants have amended claim 1 according to the Examiner's suggestion and request that this rejection be withdrawn.

# IV. Rejection under 35 U.S.C. § 103(a)

Claims 1-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Drouart.

### A. Independent claim 1

By this Amendment, Applicants have amended claim 1 to recite "wherein said gaseous reducing element is selected from the group consisting of ammonia and carbon dioxide", which

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incorporates portions of former claims 2 and 4, and respectfully submit that Drouart does not disclose or suggest this recitation.

Specifically, the Examiner rejected former claim 4 by stating that in one embodiment of Drouart, hydrogen is fed into the plasma torch. However, by this Amendment, Applicants have not included hydrogen in the group to be selected from, so the reasoning behind the rejection of former claim 4 is now rendered moot. Also, Drouart does not disclose feeding either ammonia or carbon dioxide into the plasma torch. Further, Drouart does not disclose introducing a reducing element for the purpose of reducing the nitrogen oxides produced by the plasma torch, so there is no motivation disclosed in Drouart to feed either ammonia or carbon dioxide into the plasma torch.

For the above reasons, Applicants respectfully request that the rejection of independent claim 1 be withdrawn. Also, since claims 2 and 4 have been cancelled, the rejections of former claims 2 and 4 are rendered moot.

#### B. Independent claim 5

By this Amendment, Applicants have rewritten claim 5 into independent form. Applicants respectfully traverse the rejection of claim 5 at least because Drouart does not disclose or suggest "wherein the reducing element is introduced in a solid state", as recited in claim 5.

The Examiner alleges that it would have been obvious to introduce fluorine into the plasma torch of Drouart because fluorine can lower the index of refraction. However, claim 5 also recites that "the reducing element reacts to induce reduction of the nitrogen oxides produced by interaction between nitrogen and oxygen". Nowhere in Drouart or U.S. Patent No. 4,689,212 to Mansfield (hereinafter Mansfield) is it disclosed that fluorine induces a reduction of nitrogen

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oxides. Further, Drouart does not disclose any solid state reducing elements that induce a reduction of nitrogen oxides.

Since Drouart does not disclose all of the recitations of claim 5, Applicants respectfully request that the Examiner withdraw the rejection of independent claim 5.

#### *C*. Dependent claim 6

Applicants respectfully traverse the rejection of dependent claim 6 at least because Drouart does not disclose or suggest "wherein said solid reducing element is selected from the group consisting of urea, and ammonium fluoride", as recited in claim 6.

The Examiner alleges that it is obvious to introduce fluorine compounds into the plasma torch of Drouart to lower the index of refraction of the preform. However, nowhere in either Drouart or Mansfield is it disclosed that ammonium fluoride is one of the compounds that are introduced in order to lower the index of refraction. Even assuming, arguendo, that is was obvious to introduce some fluorine compounds, there is no motivation to introduce ammonium fluoride, which is a specific compound, because it has not been shown that it ammonium fluoride has been used to lower the index of refraction of a preform.

For the above reasons, Applicants respectfully request that the rejection of dependent claim 6 be withdrawn. Also, since claim 6 is dependent on claim 5, Applicants submit that claim 6 is allowable at least by virtue of its dependency on claim 5.

#### D. Dependent claims 3 and 7-12

Since claims 3 and 7-12 are dependent on claim 1, Applicants submit that claims 3 and 7-12 are allowable at least by virtue of their dependency on claim 1.

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V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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